



JOHNS HOPKINS INTERNATIONAL

Johns Hopkins International provides clinical consulting and educational services to healthcare organizations throughout the world. This expertise is brought to health institutions by a dedicated team of consultants advising and supporting both new and existing clinical programs. The clinical, educational and administrative expertise is drawn from the knowledge and experience held by the faculty and staff of Johns Hopkins Medicine.

Hopkins tailors the scope of service for a project to achieve the desired outcomes. These engagements are customized to meet the needs of particular institutions. This document outlines services Hopkins offers institutions during development and beyond.

CONSULTING SERVICES

I.	Clinical Consulting Services	2
II.	Architectural and Engineering Design Input	4
III.	Major Medical Equipment and Tech. Evaluation	5
IV.	Human Resources Consulting Services	6
V.	Infection Control Review	7
VI.	Health Information Technology	8
VII.	Laboratory Consulting Services	9
VIII.	Performance Improvement	10

EDUCATIONAL AND TRAINING SERVICES

I.	Training Program for Image-Guided Procedures	11
II.	Nursing Consulting Services	12
III.	Radiology Consulting and Educational Programs	13
IV.	Training Opportunities for Administrators	14

CONSULTING SERVICES

Johns Hopkins International has developed a menu of consulting services available to healthcare organizations around the world. These services access the clinical, managerial and administrative experts that manage the clinical, educational, and research components of The Johns Hopkins Hospital, School of Medicine and School of Hygiene and Public Health. As additional requests for services are realized, Hopkins has the ability to bring together the experts from other departments to meet those needs.

I. Clinical Consulting Services

Medical Program Design

A review of the Medical Program is key to the success of an organization. It is essential that the planning of an institution's medical programs be done to achieve the best organizational efficiencies and clinical outcomes.

Hopkins is well aware of this need. In 2000, the health system managed 1,500,000 outpatient visits, over 170,000 visits to the emergency room and almost 70,000 cases in its operating rooms.

Our team will:

- Review the medical program of an organization
- Evaluate the criteria for each of the proposed medical programs
- Create a strategic plan for the role out of medical programs

Clinical Program Management Evaluation

Organizational planning, reporting relationships, and physician decision making influence play a critical role in shaping the culture and organizational design of the health system.

Our team will:

- Asses the organizational structure of the health system
- Review the manpower needs at the clinical, operational and leadership level
- Develop job descriptions for the department
- Establish criteria for credentialing of clinical staff
- Provide assistance in the selection of key management and senior clinical staff

Workflow

Success in healthcare organizations relies on efficient systems. With limited cost resources within many healthcare systems, an efficient organization is critical to cost effective success.

Our team will:

- Assist the development of workflow protocols
- Review current workflow procedures
- Analyze data to measure and adjust workflow
- Develop operating instructions to manage a high quality department

Clinical Pathway Templates

Clinical Pathways have been shown to be clinically and cost effective in the treatment of patients in certain specialties. Hopkins has worked to develop a multitude of clinical pathways based on years of clinical and research experience.

Our team will

- Identify inpatient or ambulatory care procedures to be evaluated for a clinical pathway
- Develop templates for the development of clinical pathways within clinical programs
- Work with an organization's clinical experts to develop these pathways
- Train medical staff in the medical techniques associated with the clinical paths
- Assist in the measurement of outcomes for clinical effectiveness

International Clinical Visits

Healthcare organizations have been seeking ways to improve the clinical care delivered at their locations. An effective way to improve care and build key physician relationships is through International Clinical Visits. The on-site clinical guidance by a Hopkins faculty team can significantly improve the quality care provided at the institution.

Our team will facilitate

- Physician participation in local patient care activities, including but not limited to surgical procedures, diagnostic evaluations and follow-up consultations
- Departmental consulting activities focusing on general medical service development.



II. Architectural and Engineering Design Input

A review of the functional space and design will be completed by the Johns Hopkins International planning group. Hopkins works with the selected architects as well as its technical team to evaluate and provide input where necessary.

Hopkins and its affiliate partners will:

- Evaluate plans for the organization's facility
- Validate the space as it relates to the program configuration
- Provide input and feedback during the design process
- Review exterior and interior plans of the new facility



III. Major Medical Equipment and Technology Evaluation

The equipment needed to carry out the clinical goals and high standard medical outcomes of an organization must be technologically and cost effectively selected. Hopkins will assist with vendor and equipment selection by tapping into the comprehensive experience of the clinical, financial and purchasing staff. Evaluation criteria for equipment can include consulting on the following:

- Needs assessment
- RFP implementation and analysis
- Vendor sources
- Service contract issues
- Alternative methods of funding (lease v. buy/use v. ownership)
- Consumable contracts assisting with the pros and cons of proposed agreements



IV. Human Resource Consulting Services

The management of a diverse group of people leads to many challenges not often faced in most organizations. This issue, combined with the need to rely on the skills of human capital to maintain high levels of patient care and satisfaction in the healthcare arena, place an added importance on Human Resource policies and procedures.

Our Human Resources Team is comprised of the same leaders who work in the day to day operations of a health system made up of more than 23,500 non-clinical staff, 2,000 full-time faculty, and over 3,100 medical staff.

Our team will

- Interview the organization's leadership to assess human resource issues
- Review current human resource programs and policies
- Assess salary administration policies and procedures
- Assist with the development of:
 - An annual review process
 - An employee handbook
 - Recruitment process and guidelines
 - Job descriptions



V. Infection Control Review

The development of effective infection control policies and procedures is essential as medical management seeks to expand clinical and surgical services. Infection control policies help reduce adverse events in a healthcare environment, potentially leading towards a lower length of stay, cost reductions and a healthier community.

Our team will

- Measure and review the infection control practices/policies
- Develop an effective infection control plan and policies appropriate to local conditions
- Provide the initial infection control training materials and handouts
- Outline long-term infection control support needs of the institution.



VI. Health Information Technology

Information Technology is seen as a critical piece to a clinically and operationally effective organization. Depending on the status of the current information technology infrastructure and as new medical management systems are introduced to a healthcare system, Hopkins is available to:

- Evaluate the current and/or proposed IT infrastructure and assess any system deficiencies
- Provide an evaluation of system options
- Facilitate the selection of the most appropriate IT systems to meet the areas of deficiencies
- Evaluate, with the IT leadership, the vendors of the health information systems being considered



VII. Laboratory Consulting Services

Organizations can improve their clinical outcomes through improvements in their laboratory services. An efficient and high quality laboratory will reduce errors and save limited resources for a healthcare organization. Hopkins provides the essential tools required to design and operate a first class quality laboratory. Areas for review, analysis and measurement include facility management, organization and personnel, equipment, documentation, quality assurance and training.

Our team will:

- Confirm the laboratory's mission, goals and related practices
- Assess the design and plan of the planned facility
- Evaluate the organizational structure and personnel
- Advise in the selection of equipment for the new facility
- Review quality assurance measures and documentation
- Optimize the quality and cost effectiveness by assessing workflow and updating methodologies
- Provide ongoing supervisory oversight of technical and/or operational management



VIII. Performance Improvement

High quality remains the primary issue facing medical institutions internationally. Quality not only affects patient care, but also plays a significant and direct role in organizational efficiency and effectiveness. Performance Improvement initiatives identify operational efficiencies and inefficiencies with the goal of enhancing the healthcare experience by reducing costs and increasing productivity.

Our team will

- Assist in development of an international quality assurance program, both clinical and non-clinical
- Educate the clinical staff how to measure the quality of the towards outcomes assessment
- Establish best practice guidelines
- Prepare an organization for Joint Commission International review
- Develop performance measurement and utilization management standards and tools
- Create continuous quality improvement initiatives
- Monitor clinical, procedural and administrative functions
- Develop and institute a risk management program



EDUCATIONAL AND TRAINING SERVICES

Education is an essential component of the mission of Johns Hopkins Medicine. Johns Hopkins Medicine has a strong commitment to education and mentoring, serving as host to hundreds of residents, fellows, and interns in the medical, research, and administrative fields. Johns Hopkins faculty is eager to communicate its latest findings and experiences in both clinical and management research.

I. International Training Program For Image-Guided Procedures

Hopkins is dedicated to improving the quality of human life and healthcare by facilitating the development of minimally invasive image-guided treatments worldwide. Our team provides high quality on-site training for all members of a minimally invasive image-guided healthcare team.

The one-week training program covers the complete range of image-guided procedures, the pre- and post-procedural care, the different products available to perform these procedures, and equipment and inventory optimization guidelines. Physicians, nurses and technicians deliver the program on-site via multi-media lectures, hands-on trainings, and operations assessment. This program offers the clear benefit of allowing the trainees to perform the procedures in their own familiar environment. Additionally, this team will be available for follow up visits and for consultation after completion of the training program.

Program topics:

- Procedural protocols (e.g. angioplasty, aortic stent placement, embolization techniques, etc.)
- Patient management
- Patient monitoring/sedation
- Imaging equipment optimization
- Inventory management
- Product selection
- Billing
- Use of physician extenders
- Importance of having admitting privileges
- Importance to outpatient clinics



II. Nursing Consulting Services

In any health care delivery system, skilled nursing represents a critical component, necessary to the support quality medical programs. An organization must consider the need for qualified nurses and training of an adequate number of well-educated nurses to carry out the organization's mission. Hopkins employees more than 3,000 full-time nursing staff, plus a large number of nursing-consultants.

Our team will

- Assess the organizational structure of the nursing department, and make recommendations on such items as reporting relationships, job titles and descriptions.
- Review the nursing staffing projections and make recommendations as to level of educational preparation of staff and nurse: patient ratios, taking into consideration the clinical demands of the patient population, and the support needs of the medical staff.
- Assist with the recruitment of qualified nurse leaders
- Provide opportunities for nursing leaders to come to Johns Hopkins Hospital, and learn from Hopkins nurse leaders. This observational experience could occur over 3-6 months. This would be a custom experience designed to meet the specific objectives of the individual nurse visitor.
- Facilitate the hiring and training of qualified nursing staff
- Design an educational program for nursing staff to prepare them to function in the state-of-the-art facility. This program would have three phases.
 - The residency of nurse leaders at Johns Hopkins
 - Selected Johns Hopkins nurses, with clinical and teaching expertise, would travel to provide instruction to clinical nurses on site.
 - Bring selected nurses to Johns Hopkins for short (2-week) observational experiences.
- Develop educational program for nurse managers that combines the use of on-site classes, internet-posting of materials, and periodic videoconference discussion groups with Hopkins nurse managers.
- Provide ongoing consultation to nurse leaders in program development, staff training, and clinical program evaluation.



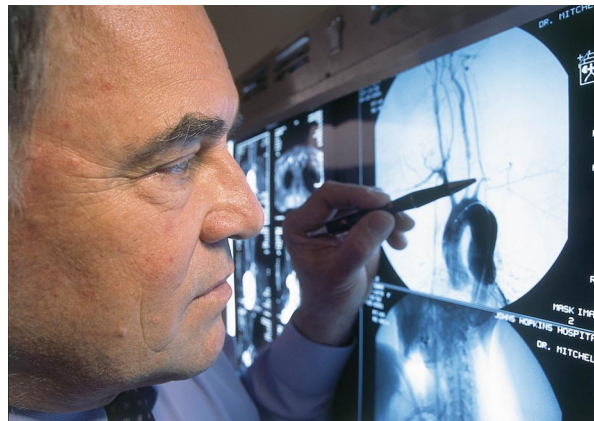
III. Radiology Consulting and Education Programs

Hopkins' team has experience in design, implementation and operations of medical imaging departments. We provide a wide array of consulting services specific to medical imaging, ranging from equipment selection, information systems selection and implementation, patient flow, registration, scheduling, room design, clinical protocols, strategic planning and project management to administrative and operational support services.

Our team will

- Conduct an assessment of the organization. This test will assist Hopkins with development of the educational program recommendations.
- Provide a customized clinical training program to meet the student needs.
- Develop and deliver a complete condensed 12-month didactic training program in Baltimore.
- Send a clinical instructor overseas to train students that have completed assessments.

Options can be customized to meet the needs of the organization's students and technologists. The organization may choose to select from combinations of these options or may customize an option to best suit their needs.



IV. Training Opportunities for Administrators

Johns Hopkins has a strong commitment to education and mentoring, serving as a host to a number of residents, fellows and interns in medical, research and administrative fields. The system is committed to sharing information and providing educational opportunities for experienced and trained professionals. This exposure aims to demonstrate how physicians, nurses and administrators work together to effectively manage functions and deliver service to patients.

The following details the core rotations and electives as well as the specific content and exposure across all rotation options. The rotations were selected with a typical organization's specific training needs in mind, however, upon request, additional rotations in unlisted areas may be arranged.

The rotations include by are not limited to:

Core Rotations

Oncology
Cardiology
Medicine
Ambulatory Care

Surgery
Pediatrics
Radiology

Elective Rotations

Anesthesia
Emergency Medicine
Admitting and Registration
Rehabilitation and Physical
Medicine
Hospice
Laboratory science
Medical record
Information systems

Rotations content and exposure is based on the individual's wants and needs. Detailed below are examples of past requests and experiences:

- One-on-one meetings with administrative staff to gain a top down view of the department, its intricacies, and how to effectively manage in a decentralized environment.
- Tour of the department and/or facility
- Participation in department meetings to gain an understanding of programmatic development.
- Overview of current department projects and priorities.
- Explanation of the operational and capital budgetary processes.
- Discussion of volume projections and analyses and how they impact day-to-day operations as well as long range planning.
- Meeting with Director of Nursing to discuss current staffing models, patient flow, and standards of care.
- Understanding of recruitment and retention of a shrinking nursing and allied health workforce.
- Exposure to planning and marketing new services and providers – strategies, data resources, and implementation formats.
- Introduction to organizational dynamics and structure, i.e. the integration and interaction between the hospital and university.
- Exposure to the business planning process from a financial and operational perspective.

Administrative rotations can be structured in varying ways to best suit the needs of the organization. Our staff has the ability to facilitate 1-2 day visits, 1-2 week rotations, or the ability to customize extended rotations ranging from 1-6 months.